Férussac and d'Orbigny's "*Histoire naturelle générale et particulière des Céphalopodes acétabulifères*": Dates of Publication of Plates and Text

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ABSTRACT

Férussac and d'Orbigny's "*Histoire naturelle générale et particulière des Céphalopodes acétabulifères*" is an essential contribution to teuthology, because of the numerous new species described, and because it represents the first important compilation of cephalopods. Issued between 1834 and 1848, in 21 livraisons, the actual dates of publication of most of its parts were hitherto uncertain. A thorough bibliographic search has allowed us to gather new information about the publication of this work. We can now identify and date precisely the 30 plates issued in 1834 and the 72 plates issued in 1835, the remaining 42 plates are dated 1839–1841 or 1839–1842. D'Orbigny's text was issued between 1839 and 1848 (livraison 12–21). The last three livraisons (1845–1848) included only text.

Key Words: Cephalopods; Publication dates; Férussac and d'Orbigny.

INTRODUCTION

During the first half of the 19th Century, a vast amount of material was collected by the scientists participating in French voyages around the world, the accounts of which were published under the following titles: *Voyage aux terres Australes* (*le Géographe, le Naturaliste, la Casuarina*) from 1800 to 1804 by Péron; *Voyage de la Coquille*, from 1822 to 1825 by Lesson; *Voyage en Amérique méridionale*, from 1826 to 1833 by d'Orbigny; *Voyage autour du monde* (*Uranie et Physicienne*), from 1817–1820 and *Voyage de l'Astrolabe*, from 1826 to 1829 by Quoy and Gaimard; *Voyage de la Bonite*, from 1836 to 1837 by Eydoux and Souleyet. The specimens collected on all of these voyages were deposited in the Muséum National d'Histoire Naturelle, Paris, and described not only by the collectors themselves, but also by other contemporary zoologists such as de Blainville, Lamarck and Férussac. These collections gave rise to numerous works that constitute a considerable contribution to the development of natural history.

The publications issued during the first half of the 19th century were delivered as a series of numbered parts, or livraisons, and several years were often necessary to complete a work. Such is the case for the "*Histoire naturelle générale et particulière des Céphalopodes acétabulifères*. . ." by Férussac and d'Orbigny, which was issued in 21 livraisons, from 1834 to 1848, and whose publication was particularly lengthy and confused.

Férussac intended to publish an important and general work on Mollusca ("*Histoire naturelle, générale et particulière des Mollusques*"), where all the monographs written by him and other authors might be included. As early as 1825, he had asked d'Orbigny to collaborate in the publication of the "*Histoire des Céphalopodes*". D'Orbigny started at once to produce plates and text, but in 1826 he left for an eight year long voyage to South America. It was only in 1834–35, after his return, that the first parts were distributed. Férussac died in 1836, and it was not until 1837 that d'Orbigny could recover his manuscript, and he then spent the following two years updating it (1839: issue of the first part of d'Orbigny's text).

DESCRIPTION OF THE WORK

The "*Histoire naturelle générale et particulière des Céphalopodes acétabulifères*. . ." comprises 2 volumes bound according to the instructions of d'Orbigny:

1—A volume of text, starting with d'Orbigny's Preface (pp. I-LVI), followed by 361 pages of taxonomic descriptions. The first livraison of text (livr. 12) is dated 1839 and largely postdates the Atlas.

An introduction to Mollusks and general remarks on Cephalopods by Férussac (96 pages), was issued in liv-

[livrai]sons 1 to 6 (1834–1835). A copy of this text was consulted at the "Bibliothèque Nationale" in Paris, where it is kept in the original wrapper, on the cover of which appears: "*Histoire naturelle générale et particulière des Mollusques—Monographie des Céphalopodes Cryptodibranches*". This part was originally intended to be included in the work, but d'Orbigny considered it to be obsolete. In his instructions to the binder he specifies that it is not part of the work on the Cephalopods and must therefore be bound separately.

2—An Atlas of 144 plates (90 plates named "Cryptodibranche", 52 named "Acétabulifère", one bearing both names (Octopus pl.23) "Cryptodibranche" and "Acétabulifère", and one having neither of them (Bellerophon pl.7).

Winckworth (1942) stated that a large number of plates were ready in 1826, when d'Orbigny left for South America; but were delivered only after his return in 1834. Férussac was at that time publishing the "*Histoire naturelle . . . des Mollusques terrestres et fluviatiles*" in collaboration with Deshayes. He also had to assume the heavy costs of the "*Bulletin Universel des Sciences et de l'Industrie*", which he created and managed. However, Férussac (1831:374) himself confirms that most of the "Cryptodibranche" plates were ready in 1831: "*depuis longtemps tous les Céphalopodes de l'ordre des Cryptodibranches . . . composent cet ouvrage prêt à être livré à l'impression, et dont les planches au nombre de près de 80 sont tirées et enluminées*".

HISTORICAL ACCOUNT OF PREVIOUS RESEARCH

Sherborn and Woodward (1901:75) were the first to publish some dates, in a footnote to their paper on the publication dates of "*Mollusques terrestres et fluviatiles*" by Férussac and Deshayes. They are very concise and do not mention their sources: "Of the dates of publication of this work all that can at present be said is that the first three out of 21 liv. appeared in Sept. 1834, nos.4–9 in 1835, no.12 in 1839, nos.13–18 in 1840 taking the work up to p. 240; and that it was finished in 1848".

The copy of Férussac and d'Orbigny's work in The Natural History Museum, London, gives some evidence of how Sherborn deduced some of the dates. A handwritten note says:

"It is obvious, as the date 1837 occurs on pp. III + 27 & 1838 on pp. V + 73 & 1839 on p. 139—that no text was published before 1837. 9 parts were published by 1835 (clearly these were all plates or part of the text to volume II Atlas, which containing no species does not concern us). Part 12 was published in 1839 & 13–18 (bringing the work up to p. 240) in 1840. A fresh font of type was used on p. 241 (compare the 444's in the pagination) & references to 1845 are frequent between pp. 241–361.

I therefore regard Vol. I, pp. I-LVI & 1–240 as 1840; pp. 241–361 as 1848; Vol. II text, pp. 1–96 as 1835".

These considerations are dated October 1901. The last part is repeated in the bibliography of the Index Animalium (Sherborn, 1922: LIII), with an extra remark: "[Dates] of plates unknown".

The references to 1835 most probably come from the *Bibliographie de la France*, which he thouroughly consulted to date Férussac and Deshayes' "*Histoire naturelle des Mollusques. . .*". He thus probably knew that the first 9 livraisons were issued in 1834 and 1835, and that they comprised only plates (although he did not know which ones) and Férussac's preface.

Thus Sherborn did not have sufficient information to date the plates, but he attempted to date the text, relying on the dates cited in the first pages of the text and in the preface by d'Orbigny. His conclusion was that the text could not have been issued before 1837 (he had no data regarding livraisons 10 and 11).

As far as the dates of livraisons 12 (1839) and 13–18 ("bringing the work up to p. 240"; 1840) are concerned, we could not determine his sources. He stated that a fresh type font was used on p. 241, in the pagination, but after a thorough examination of the different copies we could consult, we noticed that such a change in the pagination font of type actually occurs on page 273.

Winckworth (1942) had some additional data that allowed him to propose dates for the plates issued in 1834–1835. He possessed a bound copy of the 1834–1835 livraisons, although he did not have enough information to know precisely if this copy represented 9, 10 or 11 livraisons, and which of the plates were issued in 1834 and which were issued in 1835.

For the text, he used:

- the dates proposed by Sherborn and Woodward (1901);

- d'Orbigny's "*Mollusques vivants et fossiles*" (1845), a thorough reading of which allowed him to point out that all the plates and the text up to and including page 271 are mentioned. This led him to introduce an extra break in the text, and to date as 1848 all the text following page 271;

- the text of d'Orbigny himself, where 1839 is the latest bibliographic reference on page 210, and where the "*Mollusques vivants et fossiles*" (1845) is first mentioned on page 273;

- the indications on the back wrappers of the "*Histoire. . . des mollusques terrestres et fluviatiles*", with which he, however, partly disagrees. This is discussed in more detail below.

ORIGINAL RESULTS AND DISCUSSION

Three articles issued in the "*Bulletin zoologique*" and in the "*Annales des Sciences naturelles*" enlightened us as to the content of the first livraisons, and encouraged us to investigate further and to retrace the history of the publication of the "*Histoire générale et particulière des Céphalopodes Acétabulifères*". Successively, the following data were gathered from 11 different sources:

1—"*Bibliographie de la France, ou Journal général de l'Imprimerie et de la Librairie*". Paris, Pillet Ainé:
23e année, no. 39, 27 Sept. 1834, p. 615, no. 5229;
24e année, no. 16, 18 Avril 1835, p. 246, no. 2099;
no. 23, 6 Juin 1835, p. 360, no. 3058.

The issue, number of pages of text and plates of livraisons 1–9, are announced but no details are given on the content of the livraisons: Livraisons 1–3 (27 September 1834): 30 plates and 5 sheets of text; livraisons 4–6 (18 April 1835): 29 plates and 7 sheets of text; livraisons 7–9 (6 June 1835): 25 plates and 1 sheet with front page.

2—"*Bulletin Zoologique*", 2e section, 1835:
- p. 14–16: some details on livraisons 1–3 are given;
- p. 63–65: all the species figured in the plates of livraisons 4–6 are listed.

3—"*Annales des Sciences naturelles*", 2e série, 3, Zoologie. Paris, Crochard 1835, p. 192 (f.12, March). As early as March 1835, 12 livraisons of 9 to 10 plates each are announced as ready, 9 of which were on sale (whereas *La Bibliographie de la France* announces their issue later in the same year). A list of all the species issued in the plates of the livraisons 1–9 is given.

4—"*Notice analytique sur les travaux de Zoologie de Mr. Alcide d'Orbigny*" (1856). Duméril made two favorable reports at the Académie des Sciences, on the first eleven livraisons, on the 15 December 1834 and 29 June 1835 (see also d'Orbigny's Introduction, p. II). This allows livraisons 10–11 to be dated 1835.

5—"*Registre des procès-verbaux et rapports des séances de l'Académie Royale des Sciences. Institut*", vol.10, 1832–1835: p. 579, 22 September 1834: the delivery of Férussac's first three livraisons is announced; p. 724, 29 June 1835: Duméril indicates that the last five livraisons are issued.

In the "*pochette de la séance du 15 décembre 1834*" we found Duméril's report (two handwritten pages) describing the first three livraisons, i.e. an Introduction by Férussac and 28 plates ("*les figures de l'animal de l'Argonaute argo et de son anatomie, faites par Poli . . . lithographiées par Chazal. Plusieurs espèces nouvelles de poulpes, et des dessins exécutés à Cadix d'après les dissections de deux très habiles anatomistes . . . reproduites par Jacob*".

There is no trace in the "pochette" of Duméril's report on the 29 June 1835, concerning the "last five livraisons".

Our sources are consistent with livraisons 1 to 11 being delivered in 1834–1835, the first nine three by three. The "last five livraisons" announced by Duméril in 1835 are thus livraisons 7–9 and 10–11.

6—"*La littérature française contemporaine, 1827–1844, Dictionnaire Bibliographique*" by MM. Ch.Louandre and F. Bourquelot, Paris, Félix Daguin, t.3, 1848, p. 190–191. The "*Histoire . . . des Céphalopodes*", is announced as published in Paris, 1834–1842, in 20 livraisons, each comprising 10 plates and corresponding text, 18 livraisons of which were on sale. Thus we did deduce that 18 livraisons were issued from 1834 to 1842, livraison 18 being dated 1842; we know that the last livraison (21st) was issued in 1848. From the evidence of the type font change on p. 273 and of references to d'Orbigny (1845), we consider that livraison 20 (pp. 273–320, see below) also appeared in 1848. As for livraison 19, we date it 1845, since apparently it was not yet on sale in 1844, but the text up to p. 271 is quoted by d'Orbigny (1845).

7—Two complete works (Text and Atlas) from the "*Bibliothèque Nationale*": their peculiarity is that they have been marked with different stamps (Bibliothèque Impériale, Bibliothèque Royale or Bibliothèque Nationale). All the plates are stamped, whereas the text bears only a few stamps. A thorough examination of these stamps in the two volumes of text revealed that they were not randomly distributed but seemed to correspond either to the beginning or to the end of a set of livraison (Table 1).

In one of the copies of the Atlas, all the plates are marked "*Bibliothèque Royale*", except 32 that are stamped "*Bibliothèque Impériale*". These 32 plates correspond to most of the plates that we consider as belonging to livraisons 1–3. We conclude that the latter set constitutes a homogenous lot, which can be dated 1834, except for 4 plates of *Argonauta*, which we are sure belong to livraisons 7–9 (*Bull.Zool.* 1835 and *Ann.Sci.nat.* 1835).

All the plates in the second Atlas are stamped "*Bibliothèque Royale*", except 46 that are marked "*Bibliothèque Nationale*" (BN). Knowing what is included in the first 9 livraisons, and from what we infer is included in livraisons 10–11 (confirmed by our source no. 8), we deduce that the stamp "*Bibliothèque Nationale*" was used for all the plates of livraisons 4–6, for almost all the plates of livraisons 10–11 and for one plate of livraisons 7–9.

8—An incomplete bound copy of the work present at the National Museum of Wales, the title page of which is "*Histoire naturelle générale et particulière des Mollusques*", contains the *Introduction and general remarks on Cephalopods* by Férussac, and 101 plates. It corresponds perfectly to the first 11 livraisons, issued in 1834–1835, as detailed in the preceeding paragraphs. Only one discrepancy was observed: plate 25 of *Octopus*, printed by Benard and stamped as BN, that we consider to be part of the livraisons 10–11, is not included in this copy.

The National Museum of Wales also has a complete copy with handwritten notes by Hoyle, and a series of 77 plates, unbound, corresponding to an incomplete set of livraisons 1 to 11. Plate 25 of *Octopus* is present in this last series of plates.

9—The complete copy present at The Natural History Museum, London, bears two handwritten notes. One, by Sherborn on the first page of vol.I (Text), dates the text. Its content has been discussed above. The other, by E.A.Smith on the first page of vol.II (Atlas), says: "Mr.Sherborn has been unable to discover anything definite with regard to dates of publication of any of these plates".

Table 1. Details of text livraisons, with all available information on the sheets of each livraison, inclusion (P) or not in the BIMM copy, the stamped pages in the two complete works (1 and 2) at the BN and the probable date of issue. BR = Bibliothèque Royale; BN = Bibliothèque Nationale.

Sheets	Pages/stamps	Number of sheets	P = BIMM copy	Livraison	Year
1–6	1/BR1–48	6	P	12	1839
7–12	49/BR1–96/BR1	5		13	1839–41
13–18	97/BR1 + BR2–144/BR1	5		14	1840–41
a–c 19–20	I/BR1–XXIV 145–160/BR1	5	P	15	1841
21–24	161/BR1–192/BR1	4	P	16	1841
25–29	193/BN1 + BR2–232/BR1	5	P	17	1841
d–g	XXV/BR1–LVI	4	P	18	1842
30–34	233/BN1–272	5		19	1845
35–40	273/BN1–320	6		20	1848
41–45	321/BN1–361	5		21	1848

10—An incomplete bound copy of the work, from the library of the "Laboratoire de Biologie des Invertébrés marins et Malacologie" (BIMM) at the Museum National d'Histoire Naturelle (MNHN) comprising: the introduction and preface by d'Orbigny (pp. I–LVI), the text p. 1–48 and 145–232, 30 plates, all coming from the same printer (Imp. Lemercier, Benard et C.).

We interpret this BIMM copy as corresponding to livraison 12 (pp. 1–48) and livraisons 15–18 (pp. I-LVI; 145–232), i.e. five livraisons, each of 4 to 6 sheets of text and 6 plates (livraison 17 is announced on back wrappers as comprising 5 or 6 sheets of text and 6 plates). This interpretation also takes into account the observations on the other copies of the work.

There remain 12 plates of the Atlas that belong neither to the first 11 livraisons nor to the BIMM copy. Printed well before the text, they are thought to have been issued in livraisons 13–14 (i.e. two livraisons of 6 plates each).

Thus all the plates were delivered before 1845 (citations in d'Orbigny, 1845). The livraisons 19, 20 and 21 include only text.

11—"*Notice analytique sur les travaux zoologiques et paléontologiques de Mr.Alcide d'Orbigny*" (1844). D'Orbigny states that his manuscript was finished in 1839. However, later, the death of the publisher interrupted the printing of the text, and caused several trials. This accounts for the gaps in the publication of livraisons from 1842 to 1845, and from 1845 to 1848.

TEXT

The data gathered from the incomplete BIMM copy, together with the stamps on the text in the two complete copies of the BN have led us to propose that the text was issued in 10 livraisons.

Livraison 12, pp. 1–48, 1839. This livraison is included in the incomplete copy of the BIMM. The first page is stamped "Bibliothèque Royale" in the BN. Its issue is announced on the back wrappers of "*Mollusques terrestres et fluviatiles*" (Winckworth, 1942). After three years without any livraison being issued, it seems obvious that d'Orbigny, who had started to rewrite his manuscript in 1837 (cf. Introduction p. III), had published the initial part of it in this livraison. It also seems evident that the Introduction, which cites works issued in 1840–1841, cannot have been issued in 1839.

Livraison 13, pp. 49–96, 1839–1841. The stamp "Bibliothèque Royale" occurs on the first and last page of this livraison, which constitutes 5 sheets. Further supporting evidence is that this livraison is not included in the incomplete BIMM copy. The announcements on the back wrappers of "*Mollusques terrestres et fluviatiles*" (Winckworth, 1942) state that 16 livraisons were issued in 1839–1841. Lacking any further information, we date livraison 13 as 1839–1841.

Livraison 14, pp. 97–144, 1840–1841. The stamp "*Bibliothèque Royale*" is on p. 97 of both copies in the BN, and also on p. 144 in one of these copies. The break at page 97 is thus confirmed twice. The incomplete BIMM copy lacks pages 49–144, confirming the end of the livraison. A reference to 1839, on p. 139, allows livraison 14 to be dated 1840–1841.

Livraison 15, Introduction, pp. I-XXIV, and text pp. 145–160, 1841. This livraison is included in the BIMM copy, and is stamped on p. I and p. 160 of the BN copy. Stamps in the text corresponded to a livraison of only two sheets, which seemed insufficient to us. When the first part of the introduction is included, a livraison of 5 sheets is obtained, stamped at the beginning and at the end. This is consistent with the issue of the Introduction in two separate livraisons (stamps on p. I and on p. XXV). References to publications issued in early 1841, as well as indications on the above-quoted wrappers lead us to propose the date of 1841 for livraison 15.

Livraison 16, pp. 161–192, 1841. This livraison is included in the BIMM copy. The BN copy is stamped at the beginning (p. 161) and at the end (p. 192). Livraison 16 was issued between two other livraisons of 1841 and is therefore dated 1841.

Livraison 17, pp. 193–232, 1841. This livraison is in-

Table 2. Publication dates of the Atlas plates, with identification of the corresponding livraison. Pl = plate number; stp = stamps on the Bibliothèque Nationale copies; BI = Bibliothèque Impériale; BN = Bibliothèque Nationale.

	Pl	stp	Livraison	Date
Octopus	1	BI	1–3	(1834) 1826
	2	BI	1–3	22 Sept 1834
	3	BI	1–3	22 Sept 1834
	3/2°	BI	1–3	22 Sept. 1834
	4	BI	1–3	(1834) 1826
	5	BI	1–3	22 Sept 1834
	6	BI	1–3	22 Sept. 1834
	6/2°	BI	1–3	22 Sept 1834
	6/3°	BI	1–3	22 Sept. 1834
	7	BI	1–3	22 Sept. 1834
	8	BI	1–3	22 Sept 1834
	9	BI	1–3	22 Sept. 1834
	10	BI	1–3	22 Sept 1834
	11		7–9	1835
	12	BI	1–3/4–6	22 Sept. 1834
	13	BI	1–3/4–6	22 Sept 1834
	14	BN	1–3/4–6	22 Sept. 1834
	15	BN	1–3/4–6	22 Sept 1834
	16	BN	7–9	March 1835
	17		7–9	March 1835
	18	BN	10–11	29 June 1835
	19	BN	10–11	29 June 1835
	20	BN	10–11	29 June 1835
	21	BN	13–14	1839–41
	22	BN	10–11	29 June 1835
	23		13–14	1839–41
	24	BN	10–11	29 June 1835
	25	BN	10–11	29 June 1835
	26		12/15–18	1839–42
	27		13–14	1839–41
	28		13–14	1839–41
	29		13–14	1839–41
Eledone	1	BI	1–3	22 Sept 1834
	1/2°	BI	1–3	22 Sept. 1834
	2	BI	1–3	22 Sept. 1834
	3		12/15–18	1839–42
Argonauta	1	BI	1–3	22 Sept. 1834
	1/2°	BI	1–3	22 Sept. 1834
	1/3°	BI	1–3	22 Sept. 1834
	1/4°	BI	1–3	22 Sept. 1834
	1/5°	BI	1–3	22 Sept. 1834
	2	BI	7–9	March 1835
	3	BI	7–9	March 1835
	4	BI	7–9	March 1835
	5	BI	7–9	March 1835
	6		12/15–18	1839–42
Bellerophon	1	BI	1–3	22 Sept 1834
	2		12/15–18	1839–42
	3		12/15–18	1839–42
	4		13–14	1839–41
	5		12/15–18	1839–42
	6		12/15–18	1839–42
	7		12/15–18	1839–42
Cranchia	1	BN	4–6	March 1835
	2		7–9	March 1835
Sepiola	1	BI	1–3	22 Sept. 1834

Table 2. Continued

	Pl	stp	Livraison	Date
	2		7–9	March 1835
	3		12/15–18	1839–42
	4		12/15–18	1839–42
Sepia	1	BN	4–6	March 1835
	2	BN	4–6	March 1835
	3	BI	1–3	22 Sept. 1834
	3/2°	BN	4–6	March 1835
	3/3°	BN	4–6	March 1835
	4		7–9	March 1835
	4/2°		7–9	March 1835
	5	BN	4–6	March 1835
	5/2°		7–9	March 1835
	6		10–11	29 June 1835
	6/2°		10–11	29 June 1835
	7		7–9	March 1835
	8		7–9	March 1835
	9		10–11	29 June 1835
	10		7–9	March 1835
	11	BN	10–11	29 June 1835
	12	BN	10–11	29 June 1835
	13	BN	10–11	29 June 1835
	14		12/15–18	1839–42
	15		13–14	1839–41
	16		13–14	1839–41
	17		12/15–18	1839–42
	18		12/15–18	1839–42
	19		12/15–18	1839–42
	20		12/15–18	1839–42
	21		12/15–18	1839–42
	22		12/15–18	1839–42
	23		12/15–18	1839–42
	24		12/15–18	1839–42
	25		12/15–18	1839–42
	26		12/15–18	1839–42
	27		12/15–18	1839–42
Sepioteuthis	1	BN	4–6	March 1835
	2	BN	4–6	March 1835
	3	BN	4–6	March 1835
	4	BN	4–6	March 1835
	5	BN	10–11	29 June 1835
	6		12/15–18	1839–42
	7		12/15–18	1839–42
Loligo	1C	BI	1–3	22 Sept. 1834
	1A	BN	10–11	29 June 1835
	2	BN	4–6	March 1835
	3	BN	4–6	March 1835
	4	BN	4–6	March 1835
	5	BN	4–6	March 1835
	6		7–9	March 1835
	7		7–9	March 1835
	8		7–9	March 1835
	9		7–9	March 1835
	10		7–9	March 1835
	11	BN	4–6	March 1835
	12	BN	4–6	March 1835
	13	BN	7–9	March 1835
	14	BN	4–6	March 1835
	15		7–9	March 1835
	16	BN	4–6	March 1835
	17	BN	4–6	March 1835

Table 2. Continued

	Pl	stp	Livraison	Date
	18		10–11	29 June 1835
	19		7–9	March 1835
	20		13–14	1839–41
	21	BN	10–11	29 June 1835
	22		12/15–18	1839–42
	23		13–14	1839–41
	24		13–14	1839–41
Loligopsis	1	BN	4–6	March 1835
	2		7–9	March 1835
	3		7–9	March 1835
	4		13–14	1839–41
Onychoteuthis	1	BI	1–3	22 Sept. 1834
	2	BN	4–6	March 1835
	3	BN	4–6	March 1835
	3/2°	BN	4–6	March 1835
	4	BN	4–6	March 1835
	5	BN	4–6	March 1835
	6	BN	10–11	29 June 1835
	7	BN	10–11	29 June 1835
	8	BN	10–11	29 June 1835
	9	BN	10–11	29 June 1835
	10	BN	10–11	29 June 1835
	11	BN	10–11	29 June 1835
	12		12/15–18	1839–42
	13		12/15–18	1839–42
	14		12/15–18	1839–42
Ommastrephes	1		12/15–18	1839–42
	2		12/15–18	1839–42

cluded in the BIMM copy. Both BN copies are stamped at the beginning (p. 193), and one of them also at the end (p. 232). It is comprised of 5 sheets. The back wrappers of "*Mollusques terrestres et fluviatiles*" (1841), state: "*la 17ème livraison sera mise en vente à la fin d'août*" (Winckworth, 1942:35). The date and content of this livraison are given as 5 to 6 sheets of text and 6 plates. Our conclusions concerning this livraison contradict Winckworth, who disbelieved the announcement on the back wrappers.

Livraison 18, Introduction pp. XXV-LVI, 1842. Page XXV is stamped in the BN copy. This livraison is included in the BIMM copy. This second part of the Introduction comprises 4 sheets. We include it in livraison 18 since we know that livraison 17 was made of 5 or 6 sheets. The date 1842 is given by Louandre and Bourquelot (1848) and is supported by five of our sources.

Livraison 19, pp. 233–272, 1845. This livraison is not included in the BIMM copy. It is stamped on the first page (p. 233) in the BN copy. The date 1845 is based on the fact that livraison 19 is not mentioned as issued in the analyses of the "*Littérature française*" of the period from 1827 to 1844 (Louandre & Bourquelot, 1848), but the pages of this livraison are quoted in "*Mollusques vivants et fossiles*" d'Orbigny (1845).

Livraison 20, pp. 273–320, 1848. This livraison is not included in the BIMM copy. It is stamped on the first page (p. 273) in the BN copy. A different type font was used for the pagination, starting on p. 273 (especially the 5's). References to the "*Mollusques Vivants et Fossiles*" (1845) appear in the text, confirming that this livraison was published after 1845. It was probably issued with the 21st livraison in 1848.

Livraison 21, pp. 321–361, 1848. This livraison is not included in the BIMM copy. The BN copy is stamped on the first page (p. 321). "*Mollusques Vivants et Fossiles*" (1845) is cited in this livraison. It is the last livraison, and is undoubtedly dated 1848.

ATLAS

The "*Bulletin Zoologique*" and the "*Annales des Sciences Naturelles*" list all the species figured in the plates issued in livraisons 1–9. The incomplete copy at Cardiff gathers the first eleven livraisons, as detailed in sources 2, 3, 8 (see above). Plates included in the BIMM copy (source 10; livraisons 12 and 15–18) could not be dated more precisely than 1839–1842.

Details concerning the dates of publication and the corresponding livraison of each plate are summarized in table 2. Our conclusions concerning the issue of the Atlas are as follows:

Livraisons 1–3, 22 September 1834: 30 plates.

Livraisons 4–6, March 1835: 29 plates (4 of which were already issued in livraisons 1–3).

Livraisons 7–9, March 1835: 25 plates.

Livraisons 10–11: 29 June 1835: 22 plates.

Livraison 12, 1839: 6 plates.

Livraisons 13–14, 1839–1841: 12 plates.

Livraisons 15–18, 1841–1842: 24 plates.

Two plates issued in livraisons 1–3 (*Octopus* pl.1 and 4) had been distributed as early as 1826 by d'Orbigny himself (footnote p. 18: "*A la fin de 1825, nous avons fait lithographier nos planches représentant les figures de l'Octopus Cuvierii* et de l'*O.Lechenaultii*, et elles ont été distribuées à beaucoup de personnes").

CONCLUSIONS

A comparative analysis of Férussac and d'Orbigny's work and that of d'Orbigny (1845) confirms that the dates quoted by d'Orbigny are not reliable. As an example, *Cranchia* plate 1 includes three species: *C. cardioptera*, *C. minima* and *C. scabra*. In d'Orbigny (1845), they are cited as figured in plate 1, and dated respectively 1826 (p. 390), 1830 (p. 351) and 1839 (p. 240). Such inaccuracy is common in d'Orbigny's dates, and was often the case at that time.

Our bibliographic searches allowed us to acertain the precise dates of issue of the 102 plates of the Atlas that were issued in 1834 and 1835, as well as their composition. The dates of issue of the remaining plates are 1839–1842 (livraisons 12–18), but we can find no details on the actual content of each livraison.

In the publication of the text, we recognize three main stages:

1. 1834–1835. Livraisons 1–11: Introduction and general remarks by Férussac. 102 plates of the Atlas. No descriptions.

2. 1839–1842. Livraisons 12–18: Introduction and general remarks by d'Orbigny. Text pp. 1 to 232. Atlas: the remaining 42 plates.

3. 1845–1848. Livraisons 19–21: last part of the text, pp. 233–361. No plates.

The above data and conclusions are summarized in two tables. Table 1 provides information concerning the livraisons of text and corresponding dates. Table 2 provides the publication date for each plate, and associates the plate with a corresponding livraison.

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